

**TAXONOMIC CHANGES IN CHINESE LOPHOPIDAE  
WITH A CHECK LIST OF CHINESE SPECIES  
(HOMOPTERA: FULGOROIDEA)**

AI-PING LIANG<sup>1</sup>

Department of Entomology, American Museum of Natural History,  
New York, New York 10024-5192

*Abstract.*—The monotypic genus *Boresinia* Chou is removed from Lophopidae and synonymized with *Asiraca* Latreille of the subfamily Asiracinae of Delphacidae, and *Boresinia choui* Yuan & Wang becomes *Asiraca choui* (Yuan & Wang), NEW COMBINATION. *Lacusa yunnanensis* Chou & Huang is synonymized with *L. fuscofasciata* (Stål). *Bisma elasmoscelis* Jacobi is transferred to *Serida* and new distributional data for this species is given. The sugarcane and rice pest *Pyrilla perpusilla* (Walker) and the species *Pitambara dawnana* Distant are reported for the first time in southern China. A check list of the Chinese species of Lophopidae is provided.

*Key Words.*—Insecta, Fulgoroidea, Lophopidae, Delphacidae, China, new synonymies, new combinations, new records, check list

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The Lophopidae is a very small family of Fulgoroidea with 44 genera and 137 species known. The world fauna is confined to the tropics and warm temperate regions. Four genera and four species were reported from China (Chou et al. 1985). The family can be recognized by the following combination of characters: head narrower than pronotum; vertex much narrower than its length, sometimes protuberant, lateral margins strongly elevated; frons longer than wide, with carinae in addition to angulate margins; clypeus with lateral carinae; rostrum short, stout, with the apical joint short; pronotum and mesonotum short and broad, tricarinate; tegulae large; forewings with apical margin narrower, much shorter than anal margin, clavus not extending to apical part of forewing; fore and middle tibiae usually compressed and expanded, second hind tarsomere very small and without apical row of spines; male aedeagus robust with a complicated set of apical spines; and female genitalia incomplete.

During the preparation of a checklist of Fulgoroidea found in China and a review of the genera of Chinese Delphacidae, it became evident that several taxonomic changes in the Lophopidae were necessary. This paper indicates these changes. These include one generic synonym, one new specific synonym, one species transferred to the correct genus and another species to Delphacidae. There are also additions of one newly detected sugarcane and rice pest and another species. A check list summarizing the nomenclatural and distributional knowledge about Chinese species of Lophopidae is also provided.

*Depositories.*—Specimens studied here are deposited in the following institutions: American Museum of Natural History, New York, USA (AMNH); Institute of Zoology, Academia Sinica, Beijing, China (IZAS); Department of Entomology Insect Collection, North Carolina State University, Raleigh, North Carolina, USA (NCSU); Entomological Museum, Northwestern Agricultural University, Yang-

<sup>1</sup> Present address: Department of Entomology, Institute of Zoology, Academia Sinica, 19 Zhongguancun Lu, Beijing 100080, People's Republic of China.

ling, Shaanxi, China (NWAU); and Shanghai Institute of Entomology, Academia Sinica, Shanghai, China (SIE).

NEW GENERIC SYNONYMY, AND SPECIES  
EXCLUDED FROM LOPHOPIDAE

*Asiraca* Latreille

*Cercopis* Latreille 1796: 91. Type species: *Cicada clavicornis* Fabr. 1794: 41, by subsequent designation of Latreille 1810: 434. [Homonym of *Cercopis* Fabr. 1775.]

*Asiraca* Latreille 1796: 12, 202. [Replacement name for *Cercopis* Latreille.]

*Manchookhonia* Kato 1933: 10. Type species: *Manchookhonia granulipennis* Kato 1933: 11, fig. 13, by original designation and monotypy. [Synonymized by Ashe 1985: 116, 374.]

*Boresinia* Chou in Chou et al. 1983: 60, 66. [Replacement name for *Manchookhonia* Kato.] [Synonymized with *Manchookhonia* Kato, 1933: 10 by Dessart 1983: 318.] NEW SYNONYMY.

*Discussion.*—The generic name *Boresinia* was proposed by Chou (see Chou et al. 1983) to replace *Manchookhonia*, which was described by Kato (1933) in Lophopidae for the Manchurian species *M. granulipennis* Kato (see Metcalf 1955). Dessart (1983: 318) refused Chou's (1983) action and treated *Boresinia* as a new synonymy of *Manchookhonia* Kato. Ashe (1985: 116, 374) synonymized *Manchookhonia* Kato with the delphacid genus *Asiraca* Latreille. Thus, *Boresinia* Chou is a junior subjective synonym of *Asiraca* Latreille.

*Asiraca choui* (Yuan & Wang), NEW COMBINATION

*Boresinia choui* Yuan & Wang 1992: 179 (Chinese), 182 (English), fig. 1-A-D. Holotype, male, China 'Shaanxi' (NWAU) [examined]. Transferred to *Asiraca* Latreille of the Asiracinae of Delphacidae.

*Discussion.*—*Boresinia choui* was described by Yuan & Wang (1992) in Lophopidae on the basis of four specimens, two males and two females, from Shaanxi Province, China. I have examined the holotype of *Boresinia choui* and believe that it is not a lophopid, and that it is clearly a member of *Asiraca* Latreille of the Asiracinae of Delphacidae.

*Asiraca*, with two known species, occurs in the Palaearctic region. The transfer of *B. choui* to *Asiraca* brings the total number of known species in the genus to three and represents the far southern range of this primitive delphacid genus (Ashe 1985, 1990).

*Distribution.*—China (Shaanxi Province).

*Type Material Examined.*—Holotype, male, CHINA. SHAANXI: Mt. Qinling, 8 May 1980, L.-C. Xiang & N. Ma (NWAU). Paratypes: CHINA. SHAANXI: same data as holotype, 1 male, 2 females (NWAU).

NEW SPECIFIC SYNONYMY AND NEW COMBINATION

*Lacusa fuscofasciata* (Stål)

*Elasmoscelis fuscofasciata* Stål 1854: 248.

*Cixius eminens* Walker 1858: 42. [Synonymized by Atkinson, 1886: 42.]

*Lacusa fuscofasciata* (Stål); Stål 1862: 309.

*Lacusa yunnanensis* Chou & Huang in Chou et al. 1985: 128 (Chinese), 137 (English), fig. 119a, b. Holotype, female, China 'Yunnan' (NWAU) [examined].  
NEW SYNONYMY.

*Discussion.*—*Lacusa fuscofasciata* (Stål) is common and widely distributed in northeastern India, northern Myanmar (Burma) and southwestern China. Chou & Huang (see Chou et al., 1985) described *Lacusa yunnanensis* on the basis of a single female from Yunnan Province in southwestern China. They noted that *L. yunnanensis* was closely related to *L. fuscofasciata*, but that it could be distinguished from it by the fuscous transverse band near outer margin on forewing branched and the fuscous meso- and metathorax. My examination of specimens of *L. fuscofasciata* from Yunnan, Guizhou, Guangdong, and Hainan Provinces in southern and southwestern China, and Chou & Huang's female holotype of *L. yunnanensis* shows that the latter represents part of a range of variation in color morph within *L. fuscofasciata* (Stål). I, therefore, propose *L. yunnanensis* as a new synonym of *L. fuscofasciata*.

*Distribution.*—India, Myanmar (Burma), China (Guangdong, Guizhou, Hainan, and Yunnan Provinces).

*Type Material Examined.*—Holotype, female (of *Lacusa yunnanensis* Chou & Huang 1985), CHINA. YUNNAN: Xishuangbanna, Menglun, 21–30 Apr 1974, I. Chou, F. Yuan & Y.-Y. Hu (NWAU).

*Other Specimens Examined.*—CHINA. E. GUANGDONG [KWANTUNG]: Yim Na San, 17 Jun 1936, J. L. Gressitt, 1 female (NCSU). GUIZHOU: Huangguoshu, 24 Jul 1958, D.-Y. Bi & Ren, 2 males (SIE). HAINAN: Ta Hau, 7 Jul 1935, J. L. Gressitt, 1 male (NCSU); Yinggen, 200 m, 8 Jul 1960, C.-Q. Li, 1 female (IZAS). YUNNAN: Cheli, 620 m, 8 Apr 1957, L.-C. Zang, 1 male; Hekou, Xiaon-anxi, 200 m, 8 Jun 1956, K.-R. Huang et al., 1 male; 765 km S of Kunluo hwy, 1000 m, 26 Apr 1957, F.-J. Pu, 1 male; same loc., but 1050 m, 26 Apr 1957, Q.-Z. Liang, 1 female; Mangshi City, 900 m, 18 May 1955, V. Popov, 1 male; Xiaomengyang, 850 m, 2 Apr & 4 May 1957, S.-Y. Wang, 1 male, 1 female; same loc., but 3 Apr 1957, L.-C. Zang, 2 males; Xishuangbanna, Menga, 1050–1080 m, 17, 20 Aug 1958, F.-J. Pu, 2 males; same loc., but 7 Aug 1958, S.-Y. Wang, 1 female; Xishuangbanna, Menghun, 750 m, 9 Jun 1958, Y.-R. Zhang, 1 male; Xishuangbanna, Yunjinghong, 850 m, 26 Jun 1958, L.-Y. Zheng, 1 male (all in IZAS). PROVINCE UNKNOWN: Yen-ping, 13 Sep 1917, Ac. 5148, 1 female (AMNH).

*Serida elasmoscelis* (Jacobi), NEW COMBINATION

*Bisma elasmoscelis* Jacobi 1944: 17; Metcalf 1955: 48.

*Discussion.*—Jacobi (1944) described *elasmoscelis* in *Bisma* from one male and two females collected at Kwangtseh of Fujian Province in southeastern China. I am here transferring *E. elasmoscelis* into *Serida* on the basis of the shape of head, veins of forewings and hindwings, metatibial spines and the structure of male genitalia.

*Distribution.*—China (Fujian, Hainan, and Jiangxi Provinces). This is the first report of *S. elasmoscelis* in Hainan and Jiangxi Provinces.

*Specimens Examined.*—CHINA. HAINAN: Ta Han, 23 Jun 1935, J. L. Gressitt, 2 females (NCSU). SE JIANGXI [KIANGSI]: Hong San, 22, 27, 28, 29, 30 Jun 1936, J. L. Gressitt, 5 males, 3 females (NCSU; IZAS).

#### SPECIFIC ADDITIONS

##### *Pyrilla perpusilla* (Walker)

*Pyrops perpusilla* Walker 1851: 269.

*Zamila lycoides* Walker 1862: 305, pl. 15, fig. 3. [Synonymized by Fennah 1963: 720.]

*Pyrilla perpusilla* (Walker); Distant 1907: 220.

*Pyrilla pusana* Distant 1914: 326. [Synonymized by Fennah 1963: 720.]

*Discussion.*—This species has been reported from India, Sri Lanka, and Thailand. It is a major pest of sugarcane and rice in India (Rahman & Nath 1940, Brar & Bains 1979). I recently discovered 42 examples (17 males and 25 females) of this species from southern China among unidentified lophopid material in the IZAS, SIE, and AMNH. This species may become a significant pest of sugarcane in southern China, especially where the crop is grown for sugar production. This is also the first report of the genus *Pyrilla* in China.

*Distribution.*—China (Fujian, Guangxi, Hainan, Jiangxi, and Yunnan Provinces).

At present, *P. perpusilla* (Walker) has been found in five southern Chinese Provinces, from Yunnan Province in the west through to Fujian Province in the east; however, its apparent absence in several other southern Chinese Provinces (e.g., Sichuan, Guizhou, Guangdong, and Hunan Provinces) may be an artifact of lack of collecting. The distribution of this species likely will expand because sugarcane and rice are cultivated widely across southern China.

*Host Plants.*—This species not only attacks sugarcane and rice, but also may attack maize, wheat, barley, oats, guinea grass and other gramineous crops (Rahman & Nath 1940, Kalode 1983, O'Brien et al. 1987, Wilson & O'Brien 1987). Wilson & Claridge (1985) noted that *P. perpusilla* only attacks rice under favorable conditions.

*Specimens Examined.*—CHINA. FUJIAN: Chongan, Chengguan, 250–300 m, 8 Jun 1962, G.-T. Jin & Y.-M. Lin, 1 female; Chongan, Xingcun, 230–250 m, 1, 4 Jun 1960, G.-T. Jin & Y.-M. Lin, 6 males, 1 female (all in SIE); same loc., but 210 m, 6 Jun & 13 Sep 1960, Y.-R. Zhang, 2 females; Chongan, Xingcun, Longdu, 580 m, 27 Jun 1960, Y. Zuo, 1 female; same loc., but 580–640 m, 19 Jun 1960, Y.-R. Zhang, 1 female (all in IZAS); Jianning, 28, 31 May & 5, 6 Jun 1959, G.-T. Jin & Y.-M. Lin, 5 females; Jianning, Mt. Jinraoshan, 14 Jun 1959, G.-T. Jin & Y.-M. Lin, 1 male (head missing); Jianyang, Aotou, 970 m, 2 Jul 1960, G.-T. Jin, 1 male; Jianyang, Huangkeng, 350 m, 5 Jul 1960, G.-T. Jin & Y.-M. Lin, 1 female (all in SIE); Jianyang, Huangkeng, Changba, 340–440 m, 22 Aug 1960, Y. Zuo, 1 male; Jianyang, Huangkeng, Tangtou, 310–350 m, 24 Aug 1960, Y. Zuo, 4 males, 3 females (all in IZAS); Ninghua, 19 May 1959, G.-T. Jin & Y.-M. Lin, 1 female (SIE); Wuyi, 30 Aug 1953, 1 male (IZAS); Tongmuguan, 970 m, 3 Jun 1960, G.-T. Jin & Y.-M. Lin, 1 male; Yongan, Xiyang, 25 Apr 1962, G.-T. Jin, 1 female (both in SIE). GUANGXI: Jinxiu, Zhongliang, Linzucun, 600 m, 21 Nov 1981, G.-T. Jin & F.-L. Li, 1 female (SIE). HAINAN: Qiongzong, 6 Mar 1959, G.-T. Jin & Y.-M. Lin, 1 female (SIE); Shuiman, 640 m, 25 May 1960, X.-Z. Zhang, 1 male; Tongshi, 340 m, 27 May 1960, C.-Q. Li, 1 female; Yinggen, 200 m, 6 Jul 1960, C.-Q. Li, 2 females (all in IZAS). JIANGXI: Mt. Jiulian, Hualu, 16 Sep 1986, P.-Y. Zheng & G.-P. Gan, 1 female (SIE). YUNNAN: Xishuangbanna, Ganmanta, 580 m, 22 Apr 1957, F.-J. Pu, 1 female; Jinping, Changpotou, 700 m, 24 May 1956, K.-C. Huang et al., 1 female (both in IZAS). PROVINCE UNKNOWN: Yeping, 8 Feb 1917, Ac. 5148, 1 male (AMNH).

*Pitambara dawnana* Distant

*Pitambara dawnana* Distant 1912: 189; 1916: 83, fig. 63.

*Discussion.*—Distant (1912) described *P. dawnana* from a single specimen collected in Dawna Hills, Burma and later (1916) redescribed and illustrated the holotype. No host has been reported. Among undetermined Lophopidae material (IZAS), I discovered five male examples of *P. dawnana* Distant from Yunnan Province, southwestern China; this is the first record of the genus and species in China.

*Distribution.*—Lower Myanmar (Burma), China (Yunnan Province).

*Specimens Examined.*—CHINA. YUNNAN: Cheli to Menghai, 720 m, 23 Apr 1957, D.-H. Liu, 1 male; Menghai, Mt. Nannuoshan, 1300 m, 24 Apr 1957, D.-H. Liu, 1 male; Menglong, Banna, Mengsong, 1600 m, 24 Apr 1958, F.-J. Pu, 1 male; Xishuangbanna, Menghun, 1200–1400 m, 19 May 1958, Y.-R. Zhang, 1 male; Xishuangbanna, Yunjinghong, 850–2040 m, 30 Jun 1958, Y.-R. Zhang, 1 male (all in IZAS).

## CHECK LIST OF CHINESE SPECIES OF LOPHOPIDAE

Fennah (1956) provided a key to five genera and briefly discussed three species of Lophopidae from China. Chou et al. (1985) recorded four genera and four species. I here list seven genera and eight species and expect further collecting will undoubtedly reveal more species.

*Elasmoscelis perforata* (Walker 1862: 309).—Guangdong and Hainan Provinces, Taiwan.

*Lacusa fuscofasciata* (Stål 1854: 248). (= *L. yunnanensis* Chou & Huang in Chou et al. 1985: 128, 137, fig. 119a, b. NEW SYNONYMY.—Guizhou, Guangdong, Hainan, and Yunnan Provinces.

*Lophops carinata* (Kirby 1891: 140, pl. 5, fig. 9).—Hainan Province, Taiwan.

*Paracorethrura iocnemis* (Jacobi 1905: 437, pl. 21, figs. 6, 6a).—Guangxi Province.

*Pitambara dawnana* Distant 1912: 189.—Yunnan Province. New Record.

*Pyrilla perpusilla* (Walker 1851: 269).—Fujian, Guangxi, Hainan, Jiangxi, and Yunnan Provinces. New Record.

*Serida elasmoscelis* (Jacobi 1944: 17), NEW COMBINATION.—Fujian, Hainan, and Jiangxi Provinces.

*Serida latens* Walker 1857: 158.—Fujian Province.

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